

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT(S):

Fitzgerald

CONFIRMATION NO.:

8574

SERIAL NO.:

10/826,156

GROUP NO.:

2826

FILING DATE:

April 16, 2004

EXAMINER:

Tran, Minh Loan

TITLE:

CONTROLLING THREADING DISLOCATION DENSITIES IN Ge

ON Si USING GRADED GeSi LAYERS AND PLANARIZATION

Mail Stop Amendment Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Sir:

In accordance with the provisions of 37 C.F.R. 1.97 and 1.98, Applicants hereby make of record the patents and publications listed on the accompanying Form PTO-1449, and other information contained herein, for consideration by the Examiner in connection with the examination of the above-identified patent application. Each of the references A1, A3-A15, A24-A162, B1-B30, and C1-C105 were previously cited in U.S. Patent Application Serial No. 09/611,024 from which this application claims priority. Accordingly, pursuant to 37 C.F.R. § 1.98(d) and in accordance with 37 C.F.R. § 1.98(a)(2), Applicants have not supplied copies of the references cited on the attached Form PTO-1449, but shall do so upon request.

09/09/2005 SFELEKE1 00000051 10826156

02 FC:1806

180.00 OP

REMARKS

In accordance with the provisions of 37 C.F.R. 1.97, this statement is being filed (CHECK ONE):

(1)	within three (3) months of the filing date of a national application other than a continued prosecution application under 37 C.F.R. 1.53(d), or within three (3) months of the date of entry of the national stage as set forth in 37 C.F.R. 1.491 in an international application, or before the mailing of the first Office action on the merits, or before the mailing of a
	first Office action after the filing of a request for continued examination under 37 C.F.R. 1.114; or

(2) after the period defined in (1) but before the mailing date of a **final action** or a **notice of allowance** under 37 C.F.R. 1.311, and

	the requisite Statement is below, OR
\boxtimes	the requisite fee under 37 C.F.R. 1.17(p), namely \$180.00, is included herein, or
(3)	after the mailing date of a final action or notice of allowance but before the payment of the issue fee, AND
	the requisite Statement is below, AND
	the requisite petition fee under 37 C.F.R. 1.17(p), namely \$180.00 is included herein.

In addition, Applicants wish to inform the Examiner about the following co-pending patent applications and Office actions issued therein:

- 1.) U.S. Patent No. 6,107,653, U.S.S.N. 09/103,672 (Docket No. ASC-023), filed June 23, 1998 by Fitzgerald;
- 2.) U.S. Patent No. 6,232,138, U.S.S.N. 09/198,960 (Docket No. ASC-024DV), filed November 24, 1998 by Fitzgerald et al.;
- 3.) U.S. Patent No. 6,291,321, U.S.S.N. 09/265,016 (Docket No. ASC-023DV), filed March 9, 1999 by Fitzgerald;
- 4.) U.S. Patent No. 6,521,041, U.S.S.N. 09/289,514 (Docket No. ASC-022), filed April 9, 1999 by Wu et al.;
- 5.) U.S. Patent No. 6,555,839, U.S.S.N. 09/859,138 (Docket No. ASC-035), filed May 16, 2001 by Fitzgerald;
- 6.) U.S. Patent No. 6,573,126, U.S.S.N. 09/928,126 (Docket No. ASC-025), filed August 10, 2001 by Cheng et al.;
- 7.) U.S. Patent No. 6,583,015, U.S.S.N. 09/923,207 (Docket No. ASC-042), filed August 6, 2001 by Fitzgerald et al.;
- 8.) U.S. Patent No. 6,593,191, U.S.S.N. 09/859,137 (Docket No. ASC-036), filed January 17, 2001 by Fitzgerald;
- 9.) U.S. Patent No. 6,602,613, U.S.S.N. 09/764,182 (Docket No. ASC-031), filed May 16, 2001 by Fitzgerald;
- 10.)U.S. Patent No. 6,876,010, U.S.S.N. 09/611,024 (Docket No. ASC-023C1), filed June 7, 2000 by Fitzgerald;
- 11.)U.S. Patent No. 6,646,322, U.S.S.N. 09/906,438 (Docket No. ASC-051), filed July 16, 2001 by Fitzgerald;
- 12.)U.S. Patent No. 6,649,480, U.S.S.N. 09/884,172 (Docket No. ASC-044), filed June 19, 2001 by Fitzgerald et al.;
- 13.)U.S. Patent No. 6,677,192, U.S.S.N. 09/906,545 (Docket No. ASC-048), filed July 16, 2001 by Fitzgerald;

- 14.)U.S. Patent No. 6,703,144, U.S.S.N. 10/391,086 (Docket No. ASC-031C1), filed March 18, 2003 by Fitzgerald;
- 15.)U.S. Patent No. 6,703,688, U.S.S.N. 09/906,200 (Docket No. ASC-049), filed July 16, 2001 by Fitzgerald;
- 16.)U.S. Patent No. 6,723,661, U.S.S.N. 09/906,201 (Docket No. ASC-050), filed July 16, 2001 by Fitzgerald;
- 17.)U.S. Patent No. 6,724,008, U.S.S.N. 09/906,551 (Docket No. ASC-047), filed July 16, 2001 by Fitzgerald;
- 18.)U.S. Patent No. 6,730,551, U.S.S.N. 10/211,126 (Docket No. ASC-012), filed August 2, 2002 by Lee et al.;
- 19.)U.S. Patent No. 6,750,130, U.S.S.N. 09/764,177 (Docket No. ASC-032), filed January 7, 2001 by Fitzgerald;
- 20.)U.S. Patent No. 6,830,976, U.S.S.N. 09/906,534 (Docket No. ASC-054), filed July 16, 2001 by Fitzgerald;
- 21.)U.S. Patent No. 6,881,632, U.S.S.N. 10/611,739 (Docket No. ASC-044C1), filed July 1, 2000 by Fitzgerald et al.;
- 22.)U.S. Publication No. 2002/0084000, U.S.S.N. 10/022,689 (Docket No. ASC-023DVC2), filed December 17, 2001 by Fitzgerald;
- 23.)U.S. Publication No. 2002/0100942, U.S.S.N. 09/884,517 (Docket No. ASC-043), filed June 19, 2001 by Fitzgerald et al.;
- 24.)U.S. Publication No. 2002/0123183 U.S.S.N. 09/906,533 (Docket No. ASC-052), filed July 16, 2001 by Fitzgerald;
- 25.)U.S. Publication No. 2002/0125471, U.S.S.N. 10/005,274 (Docket No. ASC-043CP), filed December 4, 2001 by Fitzgerald et al.;
- 26.)U.S. Publication No. 2002/0168864, U.S.S.N. 10/116,559 (Docket No. ASC-026), filed April 4, 2002 by Cheng et al.;
- 27.)U.S. Publication No. 2003/0013323, U.S.S.N. 10/172,542 (Docket No. ASC-057), filed June 14, 2002 by Hammond et al.;
- 28.)U.S. Publication No. 2003/0034529, U.S.S.N. 10/266,339 (Docket No. ASC-043C1), filed October 8, 2002 by Fitzgerald et al.;
- 29.)U.S. Publication No. 2003/0057439, U.S.S.N. 10/216,085 (Docket No. ASC-015), filed August 9, 2002 by Fitzgerald;
- 30.)U.S. Publication No. 2003/0102498-A1, U.S.S.N. 10/253,361 (Docket No. ASC-018), filed September 24, 2002 by Braithwaite et al.;
- 31.)U.S. Publication No. 2003/0215990, U.S.S.N. 10/389,003 (Docket No. ASC-019), filed March 14, 2003 by Fitzgerald et al.;
- 32.)U.S. Publication No. 2003/0227057, U.S.S.N. 10/264,935 (Docket No. ASC-008), filed October 4, 2002 by Lochtefeld et al.;
- 33.)U.S. Publication No. 2004/0005740, U.S.S.N. 10/456,103 (Docket No. ASC-008C) filed on June 6, 2003 by Lochtefeld et al.;

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- 34.)U.S. Publication No. 2004/0031979-A1, U.S.S.N. 10/456,708 (Docket No. ASC-008B), filed June 6, 2003 by Lochtefeld et al.;
- 35.)U.S. Publication No. 2004/0075149, U.S.S.N. 10/625,018 (Docket No. ASC-043C2), filed July 23, 2003 by Fitzgerald et al.;
- 36.)U.S. Publication No. 2004/0219726, U.S.S.N. 10/854,556 (Docket No. ASC-054C1), filed May 26, 2004 by Fitzgerald;
- 37.)U.S. Publication No. 2004/0262631, U.S.S.N. 10/826,156 (Docket No. ASC-023C2) filed on April 16, 2004 by Fitzgerald;
- 38.)U.S.Publication No. 2005/0009288, U.S.S.N. 10/802,186 (Docket No. ASC-025DV2C1) filed on March 17, 2004, by Cheng et al.;
- 39.)U.S. Publication No. 2005/0156246, U.S.S.N. 11/073,780 (Docket No. ASC-008D1) filed on March 7, 2005 by Langdo et al;
- 40.)U.S. Serial No. 10/774,890 (Docket No. ASC-049C1), filed February 9, 2004 by Fitzgerald;
- 41.)U.S. Serial No. 11/120,675 (Docket No. ASC-008CC2), filed May 3, 2005 by Langdo et al;
- 42.)U.S. Serial No. 11/125,507 (Docket No. ASC-008CC1), filed May 10, 2005 by Langdo et al;
- 43.)U.S. Serial No. 11/127,508 (Docket No. ASC-008CD1), filed May 12, 2005 by Langdo et al; and
- 44.)U.S. Serial No. 11/128,628 (Docket No. ASC-008CD2), filed May 13, 2005 by Langdo et al.

It is respectfully requested that the patents and publications listed on the attached Form PTO-1449, and other information contained herein, be made of record in this application.

Respectfully submitted,

Date: September 6, 2005

Reg. No. 50,773

Tel. No.: (617) 570-1352

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Goodwin Procter LLP

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U.S. PATENT DOCUMENTS

EXAM. INIT.		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
	Al	2002/0100942	08/01/2001	Fitzgerald et al.			06/19/2001
<u> </u>	A2	2002/0084000	07/04/2002	Fitzgerald			12/17/2001
	A3	2002/0096717	07/25/2002	Chu et al.			01/25/2001
	A4	2002/0123197	09/05/2002	Fitzgerald et al.			06/19/2001
	A5	2002/0123183	09/05/2002	Fitzgerald			07/16/2001
	A6	2002/0123167	09/05/2002	Fitzgerald			07/16/2001
	A7	2002/0125497	09/12/2002	Fitzgerald			07/16/2001
· · · · · · · · · · · · · · · · · · ·	A8	2002/0125471	09/12/2002	Fitzgerald et al.			12/04/2001
	A9	2002/0168864	11/14/2002	Cheng et al.			•
	A10	2003/0013323	01/16/2003	Hammond et al.			
	A11	2003/0025131	02/06/2003	Lee et al.			
	A12	2003/0034529	02/20/2003	Fitzgerald et al.			
	A13	2003/0057439	03/17/2003	Fitzgerald			
	A14	2003/0077867	04/24/2003	Fitzgerald			
	A15	2003/0102498	06/05/2003	Braithwaite et al.			
	A16	2003/0227057	12/11/2003	Lochtefeld et al.			10/04/2002
	A17	2004/0005740	01/08/2004	Lochtefeld et al.			06/06/2003
	A18	2004/0031979	02/19/2004	Lochtefeld et al.			06/06/2003
	A19	2004/0075149	04/22/2004	Fitzgerald et al.			07/23/2003
	A20	2004/0219726	11/04/2004	Fitzgerald			05/26/2004
	A21	2004/0262631	12/13/2004	Fitzgerald			04/16/2004
	A22	2005/0009288	01/13/2005	Cheng et al.			03/17/2004
	A23	2005/0156246	07/21/2005	Langdo et al.			03/07/2005
	A24	4,010,045	03/01/1977	Ruehrwein			
	A25	4,710,788	12/01/1987	Dambkes et al.			
	A26	4,900,372	12/13/1990	Lee et al.			
	A27	4,987,462	01/22/1991	Kim et al.			
	A28	4,990,979	02/05/1991	Otto			
	A29	4,997,776	03/05/1991	Harame et al.			
	A30	5,013,681	05/07/1991	Godbey et al.			
·	A31	5,091,767	02/25/1992	Bean et al.			
EXAMIN	ER	·		DATE CONSIL	DERED	<u> </u>	

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TIS	PAT	TENT	DO	CIIN	MENTS
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EXAM. INIT.		DOCUMENT NUMBER	DATE	NAME		CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
	A32	5,097,630	03/24/1992	Maeda et al	•			
	A33	5,155,571	10/13/1992	Wang et al.				
	A34	5,159,413	10/27/1992	Calviello et	al.			
-	A35	5,166,084	11/24/1992	Pfiester				
	A36	5,177,583	01/05/1993	Endo et al.				
-	A37	5,202,284	04/01/1993	Kamins et a	1.			
	A38	5,207,864	05/04/1993	Bhat et al.				
	A39	5,208,182	05/04/1993	Narayan et a	al.			
	A40	5,210,052	05/11/1993	Takasaki				
	A41	5,212,110	05/18/1993	Pfiester et a	1.			-
	A42	5,221,413	06/22/1993	Brasen et al	•			
	A43	5,241,197	08/31/1993	Murakami e	t al.			
	A44	5,250,445	10/05/1993	Bean et al.				
	A45	5,252,173	10/12/1993	Inoue				
	A46	5,279,687	01/18/1994	Tuppen et a	l.			
	A47	5,285,086	02/08/1994	Fitzgerald, .	ir.			
	A48	5,291,439	03/01/1994	Kauffmann,	et al.			
	A49	5,298,452	03/29/1994	Meyerson				
	A50	5,308,444	05/03/1994	Fitzgerald e	t al.			
	A51	5,310,451	05/10/1994	Tejwani et a	ıl.			
	A52	5,316,958	05/31/1994	Meyerson				
	A53	5,346,848	09/13/1994	Grupen-She	mansky et al.			
	A54	5,374,564	12/20/1994	Bruel				
	A55	5,413,679	05/09/1995	Godbey		-	-	
· · · · · · · · · · · · · · · · · · ·	A56	5,424,243	06/13/1995	Takasaki				
	A57	5,425,846	06/20/1995	Koze et al.				
	A58	5,426,069	06/20/1995	Selvakumar	et al.			
	A59	5,426,316	06/20/1995	Mohammad				
	A60	5,461,243	10/24/1995	Ek et al.	 			
	A61	5,461,250	10/24/1995	Burghartz e	t al.			
	A62	5,462,883	10/31/1995	Dennard et	al.			
XAMIN	ER	1	1		DATE CONSID	ERED	I	

A90

A91

A92

A93

EXAMINER

5,847,419

5,859,864

5,877,070

5,891,769

12/08/1998

01/12/1999

03/02/1999

04/06/1999

Imai et al.

Goesele et al.

DATE CONSIDERED

Liaw et al.

Jewell

INFORMATION DISCLOSURE STATEMENT

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U.S. PATENT DOCUMENTS								
EXAM. INIT.		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE II APPROPRIATE	
	A63	5,476,813	12/19/1995	Naruse				
	A64	5,479,033	12/26/1995	Baca et al.				
	A65	5,484,664	01/16/1996	Kitahara et al.				
44.	A66	5,523,243	06/04/1996	Mohammad				
	A67	5,523,592	06/04/1996	Nakagawa et al.				
	A68	5,534,713	07/09/1996	Ismail et al.			***************************************	
	A69	5,536,361	07/16/1996	Kondo et al.				
	A70	5,540,785	07/30/1996	Dennard et al.				
	A71	5,596,527	01/12/1997	Tomioka, et al.				
	A72	5,617,351	04/01/1997	Bertin, et al.				
	A73	5,630,905	05/20/1997	Lynch et al.				
•	A74	5,633,516	05/27/1997	Mishima et al.				
	A75	5,659,187	08/19/1997	Legoues et al.				
	A76	5,683,934	11/04/1997	Candelaria				
	A77	5,698,869	12/16/1997	Yoshimi et al.				
	A78	5,714,777	02/03/1998	Ismail et al.				
	A79	5,728,623	03/17/1998	Mori				
	A80	5,739,567	04/14/1998	Wong				
	A81	5,759,898	06/02/1998	Ek et al.				
	A82	5,777,347	07/07/1998	Bartelink				
**** · · · · · · · · · · · · · · · · ·	A83	5,786,612	07/28/1998	Otani et al.				
	A84	5,786,614	07/28/1998	Chuang, et al.				
	A85	5,792,679	08/11/1998	Nakato				
	A86	5,801,085	09/01/1998	Kim et al.				
	A87	5,808,344	09/15/1998	Ismail et al.				
	A88	5,810,924	09/22/1998	Legoues et al.				
· · · · · · · · · · · · · · · · · · ·	A89	5,828,114	10/27/1998	Kim et al.				

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	•		U.S	. PATENT	T DOCUMENTS			
EXAM. INIT.		DOCUMENT NUMBER	DATE	NAME	1	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
	A94	5,906,708	05/25/1999	Robinson	et al.			
	A95	5,906,951	05/25/1999	Chu et al.				
·····	A96	5,912,479	06/15/1999	Mori et al.				
	A97	5,943,560	08/24/1999	Chang et a	1.			
	A98	5,963,817	10/05/1999	Chu et al.				
	A99	5,966,622	10/12/1999	Levine et a	ıl.			
	A100	5,998,807	12/07/1999	Lustig et a	1.			
	A101	6,010,937	01/04/2000	Karam et a	ıl.			
	A102	6,013,134	01/11/2000	Chu et al.				
	A103	6,030,884	02/29/2000	Mori				
	A104	6,033,974	03/07/2000	Henley et a	al.			
	A105	6,033,995	03/07/2000	Muller				
	A106	6,039,803	03/21/2000	Fitzgerald	et al.			
	A107	6,058,044	05/02/2000	Sugiura et	al.			
	A108	6,059,895	05/09/2000	Chu et al.				
	A109	6,074,919	06/13/2000	Gardner et	al.	-		
	A110	6,096,590	08/01/2000	Chan et al.				
	Alli	6,103,559	08/15/2000	Gardner et	al.			
	A112	6,107,653	08/22/2000	Fitzgerald				
	A113	6,111,267	08/29/2000	Fischer et	al.		1	
***	A114	6,117,750	09/12/2000	Bensahel e	t al.			
	A115	6,124,614	09/26/2000	Ryum et al	<i>!</i> .			
	A116	6,130,453	10/10/2000	Mei, et al.	-	1		
-	A117	6,133,799	10/17/2000	Favors, Jr.,	, et al.			
	A118	6,140,687	10/31/2000	Shimomura	a et al.			
	A119	6,143,636	11/07/2000	Forbes, et	al.			
	A120	6,153,495	11/28/2000	Kub et al.				
	A121	6,154,475	11/28/2000	Soref et al	•			
	A122	6,160,303	12/12/2000	Fattaruso		1		
	A123	6,162,688	12/19/2000	Gardner et	al.			
	A124	6,184,111	02/06/2001	Henley et a	ıl.	1		

EXAMINER

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			U.S.	PATEN	T DOCUMENTS	,		
EXAM. INIT.		DOCUMENT NUMBER	DATE	NAME		CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
	A125	6,191,006	02/20/2001	Mori				
	A126	6,191,007	02/20/2001	Matsui et a	al.			
	A127	6,191,432	02/20/2001	Sugiyama	et al.			
	A128	6,194,722	02/27/2001	Fiorini et a	al.			
	A129	6,204,529	03/20/2001	Lung, et al	l .			
-··	A130	6,207,977	03/01/2001	Augusto				
	A131	6,210,988	04/03/2001	Howe et al	l.			
	A132	6,218,677	04/17/2001	Broekaert				
	A133	6,232,138	05/15/2001	Fitzgerald	et al.			
	A134	6,235,567	05/22/2001	Huang				
	A135	6,242,324	06/05/2001	Kub et al.				
	A136	6,249,022	06/19/2001	Lin, et al.				
	A137	6,251,755	06/26/2001	Furukawa	et al.		<u> </u>	
	A138	6,261,929	07/01/2001	Gehrke et	al.			
	A139	6,271,551	08/07/2001	Schmitz et	al.			
	A140	6,271,726	08/07/2001	Fransis et	al.			
	A141	6,291,321	09/18/2001	Fitzgerald				
	A142	6,313,016	11/06/2001	Kibbel et a	al.			
	A143	6,316,301	11/13/2001	Kant				
	A144	6,323,108	11/27/2001	Kub et al.				
	A145	6,329,063	12/11/2001	Lo et al.			-	
	A146	6,335,546	01/01/2002	Tsuda et a	1.		-	07/30/1999
<u>.</u>	A147	6,350,993	02/26/2002	Chu et al.				
	A148	6,368,733	04/09/2002	Nishinaga				08/05/1999
	A149	6,372,356	04/16/2002	Thornton 6	et al.			04/028/2000
	A150	6,399,970	06/04/2002	Kubo et al	•			09/16/1997
	A151	6,403,975	06/11/2002	Brunner et	al.			
	A152	6,406,589	06/18/2002	Yanagisaw	va			
	A153	6,407,406	06/18/2002	Tezuka				06/29/1999
	A154	6,425,951	07/30/2002	Chu et al.				08/06/1999
	A155	6,429,061	08/06/2002	Rim		1		07/26/2000

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U.S. PATENT DOCUMENTS

EXAM. INIT.	,	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
	A156	6,521,041	02/18/2003	Wu et al.			04/09/1999
	A157	6,521,041	02/18/2003	Wu et al.			04/09/1999
	A158	6,555,839	04/29/2003	Fitzgerald			05/16/2001
	A159	6,573,126	06/03/2003	Cheng et al.			08/10/2001
	A160	6,583,015	06/24/2003	Fitzgerald et al.			08/06/2001
	A161	6,593,191	07/15/2003	Fitzgerald			05/16/2001
	A162	6,602,613	08/05/2003	Fitzgerald			
	A163	6,646,322	11/11/2003	Fitzgerald			07/16/2001
	A164	6,649,480	11/18/2003	Fitzgerald et al.			06/19/2001
	A165	6,677,192	01/13/2004	Fitzgerald			07/16/2001
	A166	6,703,144	03/09/2004	Fitzgerald			03/18/2003
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	A169	6,724,008	04/20/2004	Fitzgerald			07/16/2001
	A170	6,730,551	05/04/2004	Lee et al.			08/02/2002
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SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

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APPLICANTS:

Fitzgerald

SERIAL NO.:

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	B1	2001-319935	11/16/2001	JP	<u> </u>			N	Y
	B2	4-307974	10/30/1992	JP	1		-	N	N
	ВЗ	10-270685	10/09/1998	JP				N	Y
	B4	6-252046	11/19/1992	JP	1			N	Y
	B5	7-240372	09/12/1995	JP	İ	<u> </u>		NO	Abstract
	В6	11-233744	08/27/1999	JP	<u> </u>			N	N
	B7	2-210816	08/22/1990	JP				N	Abstract
	B8	6-177046	06/24/1994	JP	<u> </u>		*******	N	Abstract
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	B10	61-141116	06/28/1996	JP				N	Abstract
	B11	7-106446	04/21/1995	JP				N	N
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	B23	2 342 777	04/19/2000	GB				Y	Y
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	B25	0 683 522	11/22/1995	EP				N	Y
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